Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

1 (Canceled).

2 (Canceled).

3 (Canceled).

4 (Currently Amended). The antenna apparatus ~~according to claim 2~~ comprising:

a circuit board comprising a plurality of dipole antenna elements including inductive and capacitive elements, and

a quarter-wave sleeved balun and coaxial cable feed assembly connected to said circuit board, and wherein

said plurality of dipole elements comprise a first section and a second section,

said first section is located on the bottom side of said circuit board, and said second section is located on the top side of said circuit board and is substantially perpendicular and capacitively coupled to said first sections, and

said plurality of dipole elements are laterally offset from each other to create an overlapping of the capacitively coupled elements, and wherein

said inductive and capacitive elements are in series with a pair of J shaped elements, and

said pair of J shaped elements are patterned onto the circuit board in a clockwise direction, wherein, a first J shaped element is starting to the left and a second J shaped element is starting to the right of said quarter-wave sleeved balun and coaxial cable feed assembly.

5 (Original). The antenna apparatus according to claim 4, wherein a width of each J shaped element varies in that an area of said pair of J shaped elements that run parallel to the long axis of said circuit board is wider than the rest of the element.

6 (Currently Amended). The antenna apparatus according to claim ~~3~~ 4, wherein:

said quarter-wave sleeved balun and coaxial cable feed assembly comprises a quarter-wave length long metal tube placed over said coaxial cable feed assembly,

said quarter-wave sleeved balun is terminated to the coaxial cable shield at a point away from said circuit board,

said quarter-wave sleeved balun is left unterminated at the end closest to said circuit board.

said quarter-wave sleeved balun assembly is angled with respect to the circuit board at an minimum angle of approximately 55°, said coaxial cable feed assembly shield is terminated to the bottom side of said circuit board at the center of said ~~bent~~ dipole elements, and

said coaxial cable feed assembly center conductor passes through the dielectric of the circuit board and is terminated to said J shaped elements through said inductive elements.

7 (Currently Amended). A method for tuning an antenna apparatus comprising the steps of:

creating an circuit board comprising a plurality of ~~offset bent-dipole~~ dipole antenna elements,

patterning a first section of said plurality of ~~offset bent-dipole~~ dipole antenna elements on the bottom side of said circuit board and a second section of said plurality of ~~offset bent-dipole~~ dipole antenna elements on the topside of said circuit board so that said second section is substantially

perpendicular and capacitively coupled to said first sections,

forming said second section of said plurality of ~~offset bent-dipole~~ dipole antenna elements as a pair of J shaped elements that are patterned onto said circuit board in a clockwise direction, wherein, a first J shaped element is starting to the left and a second J shaped element is starting to the right of said quarter-wave sleeved balun and coaxial cable feed assembly, and

configuring said J shaped elements such that a width of each J shaped element is wider in that an area of said pair of J shaped elements that run parallel to the long axis of said circuit board.

8 (Currently Amended). The method for tuning an antenna apparatus according to claim 7, further comprising the steps of removing the metalization on the open end of said J shaped elements to electrically shorten said ~~offset bent-dipole~~ dipole antenna elements.

9 (Currently Amended). The method for tuning an antenna apparatus according to claim 7, further comprising the step of removing the metalization on the squared-offends of said ~~offset bent-dipole~~ dipole antenna elements to electrically shorten said ~~offset bent-dipole~~ dipole antenna elements.

10 (Currently Amended). The method for tuning an antenna apparatus according to claim 7, further comprising the step of removing the metalization on said wider area of said J shaped elements to electrically lengthen said ~~offset bent-dipole~~ dipole antenna elements.

11 (Currently Amended). The method for tuning an antenna apparatus according to claim 7, further comprising the step of adding metallization to the squared off ends of said ~~offset bent-dipole~~ dipole antenna elements to

electrically lengthen said antenna apparatus.

12 (Original). The method for tuning an antenna apparatus according to claim 7, further comprising the step of varying the thickness of the circuit board, wherein:

a thinner circuit board causes the antenna apparatus to be electrically longer, and

a thicker circuit board causes the antenna to be electrically shorter.

13 (Currently Amended). A method of manufacturing an antenna apparatus comprising the steps of:

creating ~~an~~ a circuit board comprising a dielectric substrate and inductive and capacitive elements are in series with a pair of J shaped elements,

forming a feed assembly from a single coaxial cable with a quarter-wave sleeved balun assembly,

forming ~~a~~ one piece antenna apparatus plastic shell,

positioning a plastic cap as ~~the~~ a top of said antenna apparatus plastic shell,

placing said circuit board within said antenna apparatus plastic shell just below said plastic cap, oriented in the horizontal plane,

bonding a metal baseplate to the bottom of said antenna apparatus plastic shell,

connecting said feed assembly to said circuit board and terminating said feed assembly with a connector at said metal baseplate, and

injecting a foam material to fill said antenna apparatus plastic shell and

allowing said foam material to encapsulate the upper surface of said circuit board.

14 (Currently Amended). The method of manufacturing an antenna

apparatus as recited in claim ~~11~~ 13 further comprising the step of:

selecting a pair of capacitive elements such that said pair of capacitive are substantially identical.

15 (Currently Amended). The method of manufacturing an antenna apparatus as recited in claim ~~11~~ 13 further comprising the step of creating said circuit board to be approximately 1/16" thick FR4 plated on both the top and bottom.

16 (Currently Amended). The method of manufacturing an antenna apparatus as recited in claim ~~11~~ 13 further comprising the step of selecting said foam material with respect the affect on tuning said antenna apparatus.

17 (Currently Amended). The antenna apparatus according to claim ~~1~~ 4, wherein said circuit board is elliptically shaped.